US Army Corps
of Engineers

Centers of Standardization

Roles and Relationships with Geographic Districts

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Savannah District

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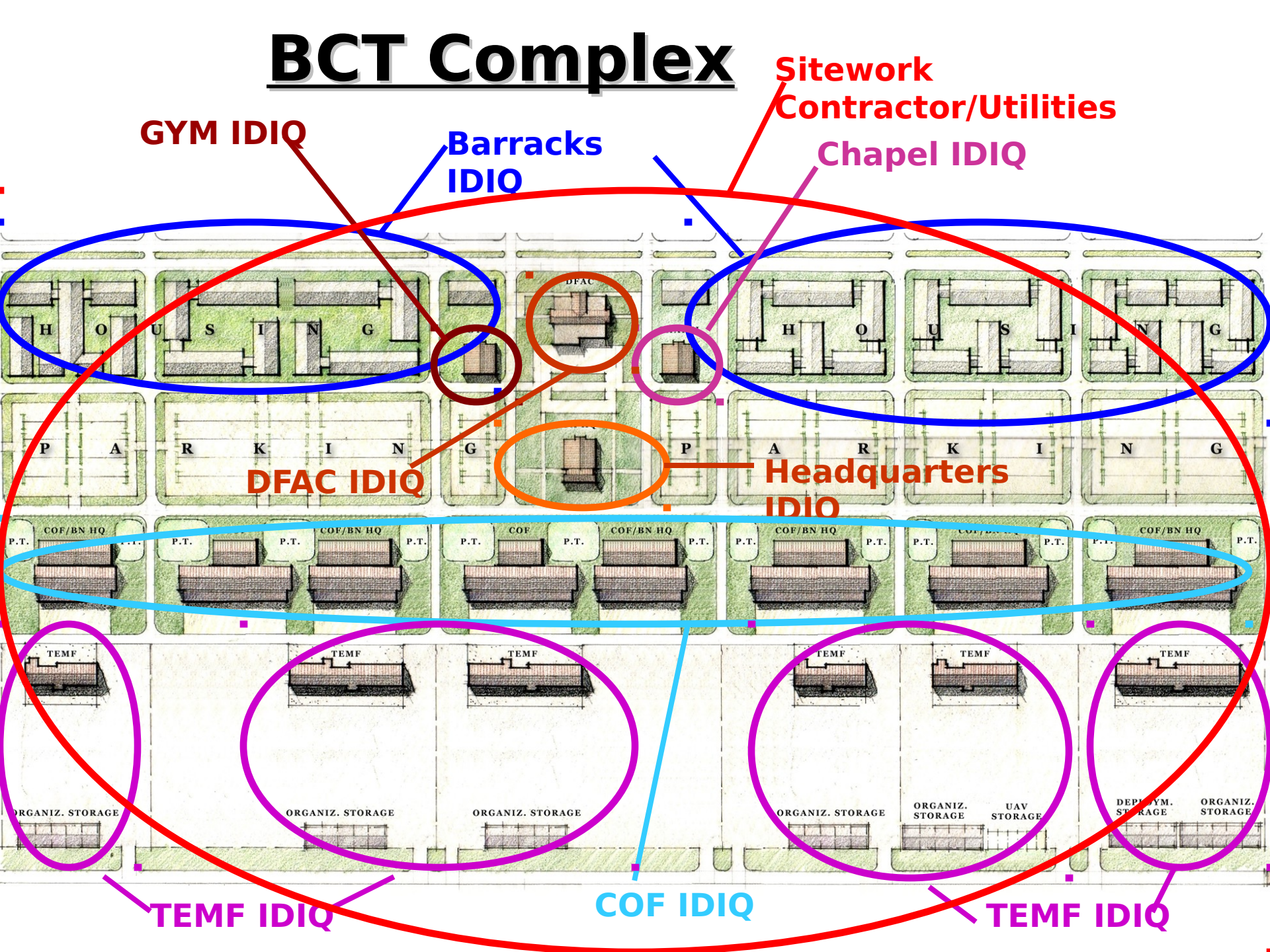
Our Goals

"A house divided against itself will fall"

It is the goal of the Centers of Standardization to form a partnership with the geographic Districts; providing timely, accurate, and cost effective engineering design and consulting while protecting the charter given to the Corps of Engineers by our customer.

Remember – we are geographic districts too!!

BCT Complex


Sitework Contractor/Utilities
GYM IDIQ
Barracks IDIQ
Chapel IDIQ
DFAC IDIQ
Headquarters IDIQ
COF IDIQ
TEMF IDIQ
TEMF IDIQ
HOUSING
PARKING
DFAC
COF/BN HQ
COF
P.T.
TEMF
ORGANIZ. STORAGE
UAV STORAGE

What are you smoking???

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- Ctr. overhead costs up (CQC, safety officer, PM, PE, etc.)
- Coordination issues between contractors at boundaries
- Not enough room for all contractors
- Higher CD costs – pay estimates, coordination, records
- Multiple contracting officers and legal offices
- One project, multiple RMS
- Control of total project costs
- Coordinating schedules, NTP, BOD
- P2 nightmare
- Environmental permitting nightmare

But there’s lots of good!!

- Faster, more efficient construction
- Best practices generated for each contractor/lessons learned
- Lower cost/time to prepare and award contacts
- Shop drawing approvals, CQC plan, schedules, carry over
- Economies of scale
- Lower contractor home office overhead
- Lower P&D costs
- Costs become predictable, better planning and programming

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Geographic District and COS Duties – End State

- COS duties defined by PgMP and Annex U to OPORD.
  - Develop and maintain Army Standards and Standard Designs
  - Program Certification
  - Project Definition and Development
  - Design/Contract Execution
  - Life-Cycle Design Sustainment
- Geographic District duties defined by SOP USACE-COS-03

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Code 0 – Planning Charrette

- Geographic District:
  - All PM duties
  - Notify COS
  - Lead Charrette
  - Coordinate schedule with COS
  - Fund any COS efforts
- COS:
  - Participate and ensure correct standard implementation
  - Review customer preferences in 1391
  - Consult on waiver requests
  - Obtain feedback for template 1391

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Code 1 – Pre-design activities

- Geographic District:
  - All PM duties
  - Notify COS
  - Preliminary site info to COS
  - Fund any COS efforts
  - Coordinate acquisition strategy for site and non-COS facilities
- COS:
  - Coordinate acquisition strategy for task order award

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Code 2/3 Parametric/Concept

- Geographic District
  - Same as Code 1 plus:
  - Design Charrette
  - Provide utility info to COS
  - NEPA/Demo/HTRW
  - Preliminary site design
  - Geotech investigation
  - Overall coordination
  - Ensure waivers obtained
  - Prepare/submit 3086
- COS
  - Facility design PDT member
  - Attend charrette
  - Input into site considerations
  - Aesthetic coordination
  - Preliminary facility cost
  - Foundation loading
  - Waiver consultant
  - 1391 template owner

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Code 4/5/8 – Project Hold/Defer/Cancel

- Geographic District:
  - Notify COS
  - Coordinate further strategies
- COS:
  - Return unused funds

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Code 6/7 - Design

- Geographic District:
  - Same as above plus:
  - Complete site design
  - Complete non-COS design(s)
  - Coordinate utility designs
  - Manage project schedule
  - Manage project cost
  - Coordinate Boiler Plate/Division 1
  - BCOE
  - Coordinate total project scope issues
  - Coordinate aesthetics between COS facilities
- COS:
  - Complete facility task order
  - Provide facility cost data to geographic district
  - Review site/other COS packages for consistency
  - Waiver/scope consultant
  - Coordinate furniture
  - Coordinate facility scope issues
    - Maintain integrity of the standard

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Code 9 – Award Construction Contract

- Geographic District
  - Award site and some task order contracts
  - Coordinate schedules for COS NTP
  - Provide S&A, EDC
  - Manage BIM As-builts
  - Coordinate all facility changes thru COS
  - Coordinate permits
  - Copy COS with final as-builts
  - All construction management
- COS:
  - Award (most) facility task orders
  - Attend pre-construction
  - Coordinate with GD on modifications
  - Coordinate on user requested changes
  - Answer RFIs, assist with claims, etc.
  - Collect lessons learned

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But wait, there's more

- Determining LDs, phasing, special considerations
- Project LEED coordination, design and construction
- Whole building commissioning agent coordination, construction commissioning
- After action reports, post occupancy evaluations
- Feedback, feedback, feedback
  - Reuse of current design on future projects where applicable

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Before the End State

- FY07 Projects
  - Projects should follow the Model RFP using the COS as a consultant.
    - Tier 1 facilities have a mandatory scope of work in the Model RFP
  - If the Model RFP does not have a Scope of Work, geographic district will work with the COS in the development of that scope.
  - Geographic District awards construction contract.
  - COS participates in technical evaluation for award.
  - Geographic District coordinates with COS on construction modifications that affect the facility functional design.

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Before the End State

- Fy08 Projects
  - Tier One/Some Tier Two Facility Types:
    - Standards developed and regional IDIQ contracts in place (Jun/Jul 07)
    - COS develops task order for project using standard and any project specific requirements.
    - Either COS or geographic district award task order against IDIQ.
    - COS remains engaged during construction
  - Other Tier Two projects shall follow the Model RFP requirements as per FY07 projects

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Before the End State

- Fy09 Projects and Beyond (End State)
  - Tier One & Two Facility Types
    - Standards developed and regional IDIQ contracts in place
    - COS develops task order for project using standard and any project specific requirements.
    - Either COS or geographic district (some tier one in FY09) award task order against IDIQ.
    - COS remains engaged during construction

The Bottom Line

Be Flexible

More about this BIM stuff

- Conversion to BIM parallels the switch from manual drawings to CADD

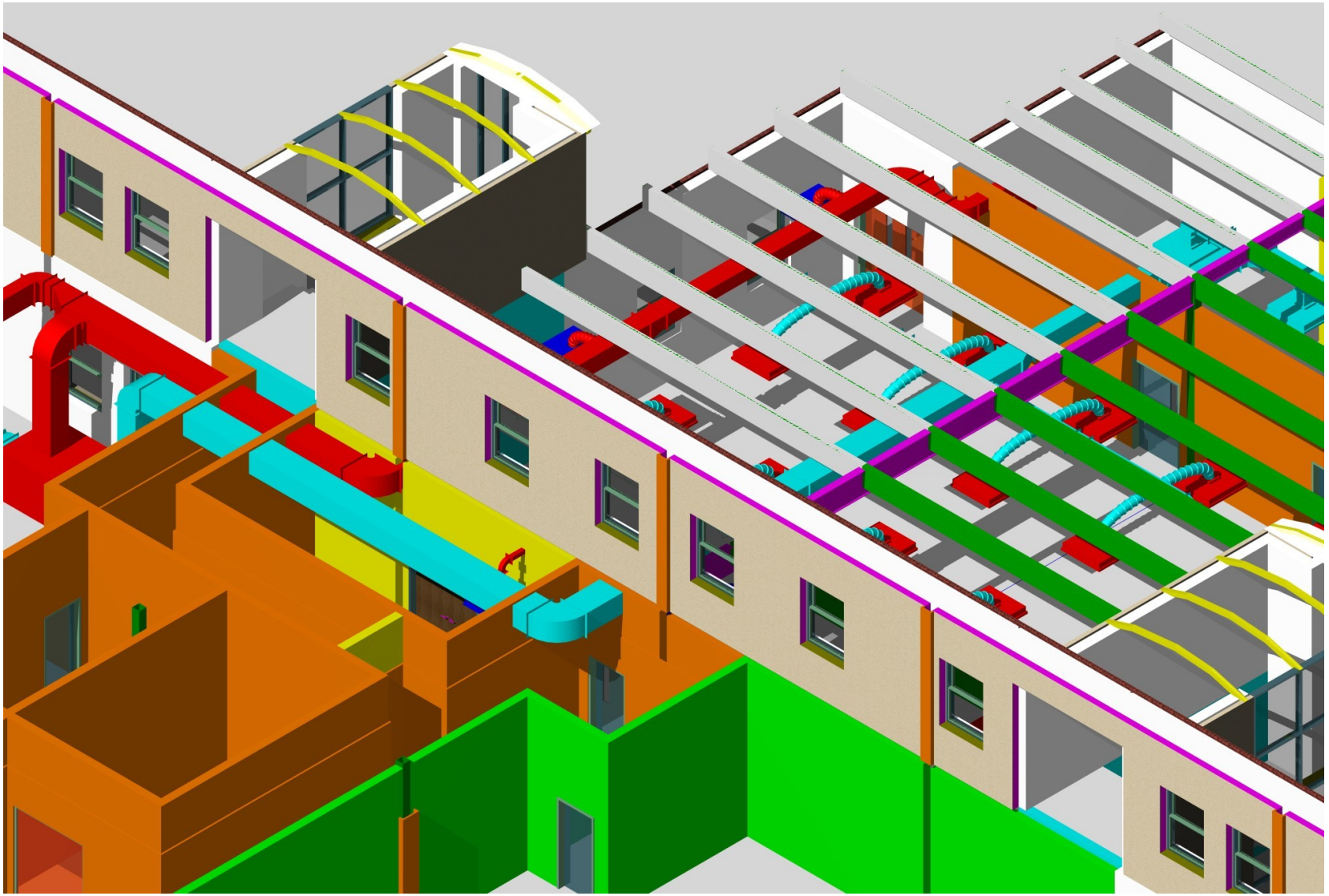
- Data evolves from design thru construction and commissioning to facility management

- Integrate Civil, Facility Management, and GIS data

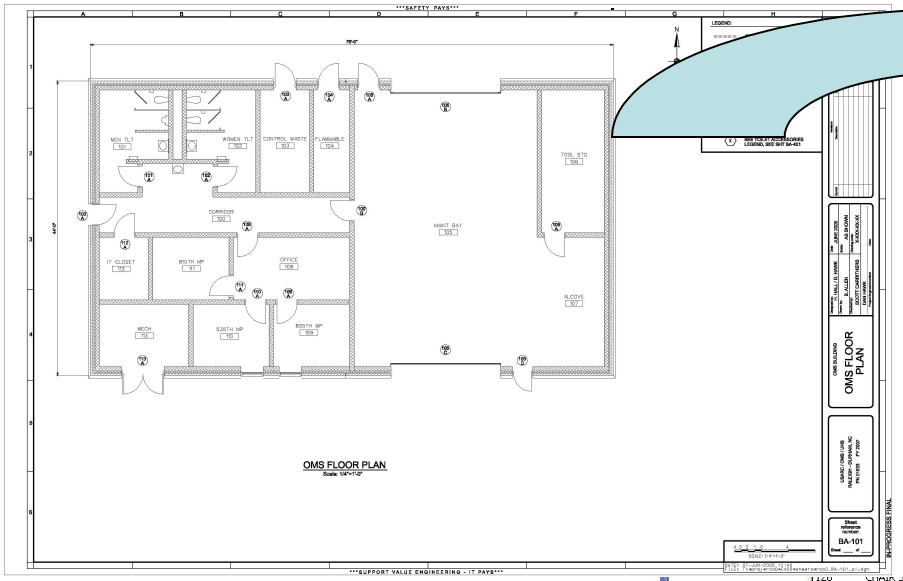
- Use BIM in planning and construction and maintenance of Building

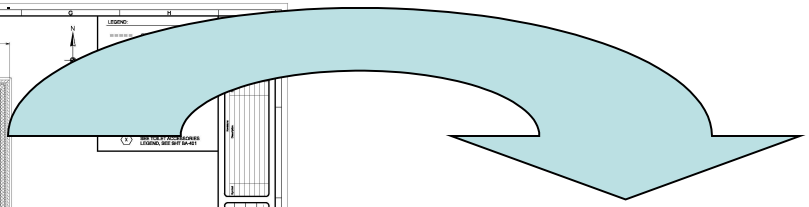
- Upgrade standard Cost Estimating data and coordination with Cost databases via .xml to automate pricing real time

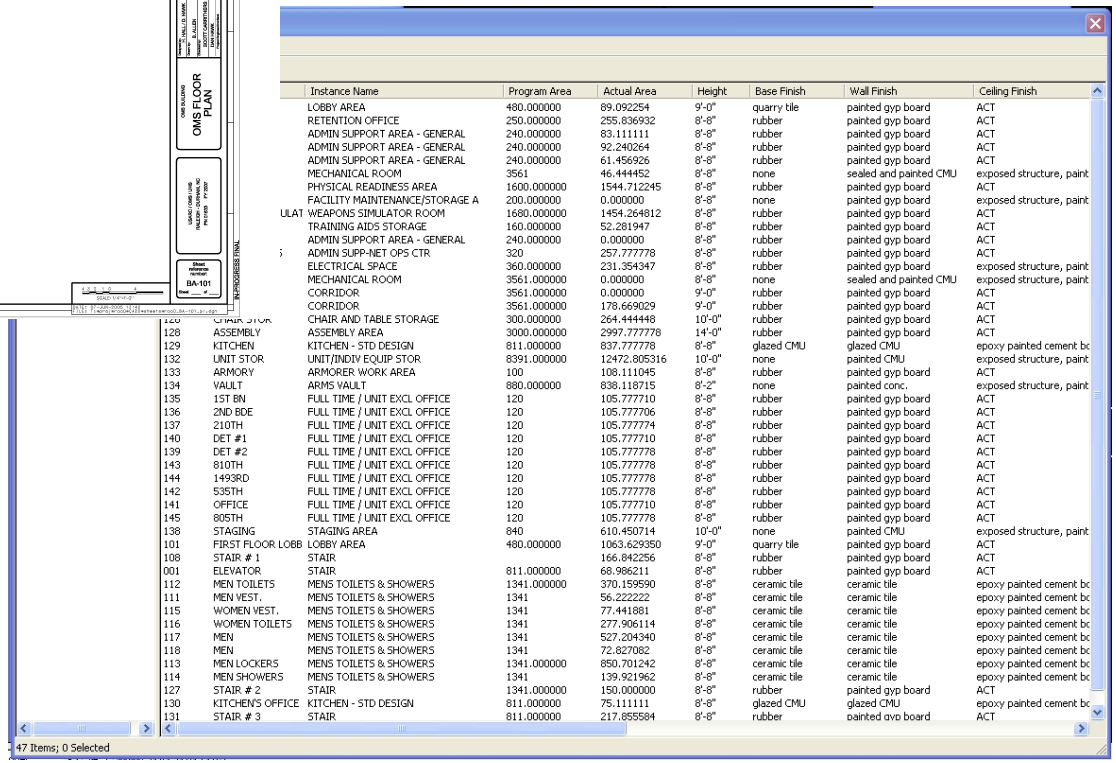
Final Renderings



Interference Checks/Contractor Planning Tool/Subcontractor Management







	Instance Name	Program Area	Actual Area	Height	Base Finish	Wall Finish	Ceiling Finish
	LOBBY AREA	480.000000	89.092254	9'-0"	quarry tile	painted gyp board	ACT
	RETENTION OFFICE	250.000000	255.836932	8'-8"	rubber	painted gyp board	ACT
	ADMIN SUPPORT AREA - GENERAL	240.000000	83.111111	8'-8"	rubber	painted gyp board	ACT
	ADMIN SUPPORT AREA - GENERAL	240.000000	92.240264	8'-8"	rubber	painted gyp board	ACT
	ADMIN SUPPORT AREA - GENERAL	240.000000	61.456926	8'-8"	rubber	painted gyp board	ACT
	MECHANICAL ROOM	3561	46.444452	8'-8"	none	sealed and painted CMU	exposed structure, paint
	PHYSICAL READINESS AREA	1600.000000	1544.712245	8'-8"	rubber	painted gyp board	ACT
	FACILITY MAINTENANCE/STORAGE A	200.000000	0.000000	8'-8"	none	painted gyp board	exposed structure, paint
ULAT	WEAPONS SIMULATOR ROOM	1680.000000	1454.264812	8'-8"	rubber	painted gyp board	ACT
	TRAINING AIDS STORAGE	160.000000	52.281947	8'-8"	rubber	painted gyp board	ACT
	ADMIN SUPPORT AREA - GENERAL	240.000000	0.000000	8'-8"	rubber	painted gyp board	ACT
;	ADMIN SUPP-NET OPS CTR	320	257.777778	8'-8"	rubber	painted gyp board	ACT
	ELECTRICAL SPACE	360.000000	231.354347	8'-8"	rubber	painted gyp board	exposed structure, paint
	MECHANICAL ROOM	3561.000000	0.000000	8'-8"	none	sealed and painted CMU	exposed structure, paint
	CORRIDOR	3561.000000	0.000000	9'-0"	rubber	painted gyp board	ACT
	CORRIDOR	3561.000000	178.669029	9'-0"	rubber	painted gyp board	ACT
	CHAIR AND TABLE STORAGE	300.000000	264.444448	10'-0"	rubber	painted gyp board	ACT
128	ASSEMBLY	ASSEMBLY AREA	3000.000000	2997.777778	14'-0"	rubber	painted gyp board	ACT
129	KITCHEN	KITCHEN - STD DESIGN	811.000000	837.777778	8'-8"	glazed CMU	glazed CMU	epoxy painted cement bc
132	UNIT STOR	UNIT/INDIV EQUIP STOR	8391.000000	12472.805316	10'-0"	none	painted CMU	exposed structure, paint
133	ARMORY	ARMORER WORK AREA	100	108.111045	8'-8"	rubber	painted gyp board	ACT
134	VAULT	ARMS VAULT	880.000000	838.118715	8'-2"	none	painted conc.	exposed structure, paint
135	1ST BN	FULL TIME / UNIT EXCL OFFICE	120	105.777710	8'-8"	rubber	painted gyp board	ACT
136	2ND BDE	FULL TIME / UNIT EXCL OFFICE	120	105.777706	8'-8"	rubber	painted gyp board	ACT
137	210TH	FULL TIME / UNIT EXCL OFFICE	120	105.777774	8'-8"	rubber	painted gyp board	ACT
140	DET #1	FULL TIME / UNIT EXCL OFFICE	120	105.777710	8'-8"	rubber	painted gyp board	ACT
139	DET #2	FULL TIME / UNIT EXCL OFFICE	120	105.777778	8'-8"	rubber	painted gyp board	ACT
143	810TH	FULL TIME / UNIT EXCL OFFICE	120	105.777778	8'-8"	rubber	painted gyp board	ACT
144	1493RD	FULL TIME / UNIT EXCL OFFICE	120	105.777778	8'-8"	rubber	painted gyp board	ACT
142	535TH	FULL TIME / UNIT EXCL OFFICE	120	105.777778	8'-8"	rubber	painted gyp board	ACT
141	OFFICE	FULL TIME / UNIT EXCL OFFICE	120	105.777710	8'-8"	rubber	painted gyp board	ACT
145	805TH	FULL TIME / UNIT EXCL OFFICE	120	105.777778	8'-8"	rubber	painted gyp board	ACT
138	STAGING	STAGING AREA	840	610.450714	10'-0"	none	painted CMU	exposed structure, paint
101	FIRST FLOOR LOBB	LOBBY AREA	480.000000	1063.629350	9'-0"	quarry tile	painted gyp board	ACT
108	STAIR # 1	STAIR		166.842256	8'-8"	rubber	painted gyp board	ACT
001	ELEVATOR	STAIR	811.000000	68.986211	8'-8"	rubber	painted gyp board	ACT
112	MEN TOILETS	MENS TOILETS & SHOWERS	1341.000000	370.159590	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
111	MEN VEST.	MENS TOILETS & SHOWERS	1341	56.222222	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
115	WOMEN VEST.	MENS TOILETS & SHOWERS	1341	77.441881	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
116	WOMEN TOILETS	MENS TOILETS & SHOWERS	1341	277.906114	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
117	MEN	MENS TOILETS & SHOWERS	1341	527.204340	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
118	MEN	MENS TOILETS & SHOWERS	1341	72.827082	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
113	MEN LOCKERS	MENS TOILETS & SHOWERS	1341.000000	850.701242	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
114	MEN SHOWERS	MENS TOILETS & SHOWERS	1341	139.921962	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
127	STAIR # 2	STAIR	1341.000000	150.000000	8'-8"	rubber	painted gyp board	ACT
130	KITCHEN'S OFFICE	KITCHEN - STD DESIGN	811.000000	75.111111	8'-8"	glazed CMU	glazed CMU	epoxy painted cement bc
131	STAIR # 3	STAIR	811.000000	217.855584	8'-8"	rubber	painted gyp board	ACT

47 Items; 0 Selected

Information Links

Design information, specifications, catalog cuts, quantities, pictures, etc.

Questions???